# **NGDA** Dataset Report

Official NGDA Title: Airports

Metadata Record Title: Airports (National) - National Geospatial Data Asset (NGDA) Airports

**A–16 NGDA Theme:** Transportation

# **Executive NGDA Theme Champion(s):**

Name: Richard McKinney

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# Theme Lead(s):

Name: Raquel Hunt

**Agency: DOT** 

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# **Dataset Manager(s):**

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#### Metadata:

Registration Status: Complete Registered on 4/22/2014

GeoPlatform Link\*: https://www.geoplatform.gov/node/243/11f5180e-1c38-4858-a72d-

6f97f1637691

Data.gov Metadata Link\*: <a href="http://catalog.data.gov/harvest/object/37e54bc8-99e1-4b6e-8eaa-">http://catalog.data.gov/harvest/object/37e54bc8-99e1-4b6e-8eaa-</a>

19f74b3c65de/html

<sup>\*</sup>If the metadata has been updated and reharvested after publication of this report, the link may no longer be valid. The dataset may be searched for manually in Data.gov or GeoPlatform.gov.

# NGDA Lifecycle Maturity Assessment (LMA) Report

### **Time Frame:**

Baseline assessment responses include dataset activities from 1999 to 2015.

### LMA Submission:

Status: Complete Date: 10/5/2015

Extension Requested: No

# LMA Reviewer(s):

Supervisor: Did not review

Theme Lead: Raquel.Hunt@dot.gov

Executive Champion: richard.mckinney@dot.gov

**SAOGI\*:** richard.mckinney@dot.gov

Other: Steve.Lewis@dot.gov

### **LMA Verifier:**

Name: Raquel Hunt

Email: Raquel.Hunt@dot.gov

### **Attachments:**

To get access to any attachments referenced in the report, email the LMA Help Desk at NGDA\_LMA\_help@fgdc.gov. Please use the subject "Dataset Report Attachment(s)" and indicate the associated official NGDA title.

<sup>\*</sup>Senior Agency Official for Geospatial Information (SAOGI)

# **Lifecycle Maturity Assessment (LMA) Summary**

**Overall Maturity:** 

**Optimized**; Established

General Questions: 82%

Mature; Consistent

Stage 1 - Define/Plan: 100%

Optimized; Established

Stage 2 - Inventory/Evaluate: 100%

Optimized; Established

Stage 3 - Obtain: 100%

Optimized; Established

Stage 4 - Access: 100%

Optimized; Established

Stage 5 - Maintain: 82%

**Mature**; Consistent

Stage 6 - Use/Evaluate: 78%

**Mature**; Consistent

Stage 7 - Archive: 100%

**Optimized**; Established

# **NGDA Dataset Maturity Definitions:**

How To Calculate Maturity: https://www.geoplatform.gov/sites/default/files/How to Calculate Maturity.pdf

Maturity	Maturity Characteristics for All Lifecycle Stages
Optimized; Established Rank = 5	Dataset meets virtually all business needs of all users. The dataset is considered authoritative by owners and secondary users. It is curated across all stages of the approved lifecycle. Future needs are defined on a regular basis and resources for addressing both current and future business requirements are available.
Mature; Consistent Rank = 4	Dataset meets all the business needs of the primary owner and most of the secondary users. The dataset is curated and used as authoritative by the primary owner. Dataset is used widely by secondary users actively engaged in sustaining the dataset. Future needs are identified and steps are planned to address these. All stages are supported and reviewed on a recurring basis. The dataset is well managed in relation to the approved lifecycle.
Managed; Predictable Rank = 3	Dataset meets a significant number of the business needs of the primary owner and is widely used as an authoritative resource by secondary users. Benchmark activities are occurring in at least four of the approved lifecycle stages. Management practices in relation to the approved lifecycle is moderate but consistent. Dataset is integrating changing business requirements in lifecycle stages impacting overall maturity.
Transition; Transformation Rank = 2	Dataset meets business needs of the primary owner and has moderate use by secondary users. Benchmark activities are occurring in at least three stages. Efforts to integrate funding, include partners, and obtain data are not supported in a sustained manner. Management practices in relation to the stages of the approved lifecycle is limited.
Planned; Initial Development Rank = 1	Dataset limited in meeting business needs of the primary owner. Benchmark activities in the approved lifecycle are just starting to consider secondary uses, partnerships are forming to support additional dataset uses. Dataset development is in a very early stage. Minimal or limited management against the benchmarks in the approved lifecycle.
No Activity Rank = no activity	Dataset meets project or local business needs of the primary owner, secondary or additional uses or users were not considered, not recognized as an authoritative data or is part of a similar dataset. Not managed to any of the benchmarks in the approved lifecycle.

# **General Questions for All Stages**

1) Is there a recurring process to obtain funding for all lifecycle stages of this dataset?

**Answer:** Funding support exists but is not adequate to meet known requirements, most lifecycle stages are supported.

Justification Comment: Attachment(s): 0

The Federal Aviation Administration's Office of Airports collects data utilizing recurring processes defined in FAA Order 5010.4: Airport Safety Data Program and Advisory Circular 150/5300-18: General Guidance and Specifications for Aeronautical Surveys: Airport Survey Data Collection and Geographic Information System Standards . This program is defined through funding requests updated and submitted annually, governed by 49 U.S. Code § 47130 - Airport safety data collection. These programs are managed by the Federal Government, with additional contract support utilized as needed. The information obtained can be accessed through the FAA's National Flight Data Center who stores, maintains, disseminates and archives the data for public consumption.

http://www.faa.gov/airports/resources/advisory\_circulars/index.cfm/go/document.current/documentNumber/150\_5300-18

https://www.faa.gov/regulations\_policies/orders\_notices/index.cfm/go/document.information/documentI D/8422

2) Is there a process in place to ensure that open government and transparency guidelines are followed in all lifecycle stages for this dataset?

**Answer:** Process established, significant portions of the documentation is complete.

### **Justification Comment:**

Attachment(s): 0

The US Department of Transportation's Order 1351.34, or Data Release Policy (DRP), ensures that every lifecycle stage in the development of this dataset follows open government and transparency guidelines. The policies within the DRP are levied by the Federal Funding Accountability and Transparency Act of 2006 and the Memorandum on Transparency and Open Government (January 21, 2009).

Updates to the DRP will be released in 2015. The updates will cover the entire data and information lifecycle and be consistent with OMB Memorandum M-13-13; Open Data Policy. It will also identify touch points to related information management policies such as DOT Order 1351.37, Departmental Cybersecurity Policy; DOT Order 1351.18, Privacy Risk Management; and DOT Order 1351.28, Records Management

The Department has not yet implemented its policy for proper handling of CUI. Our related policies will be updated, as necessary, once the CUI policy has been issued.

Sources:

http://assets.sunlightfoundation.com.s3.amazonaws.com/policy/papers/DOT%20Order%201351.34.pdf

http://www.gpo.gov/fdsys/pkg/PLAW-109publ282/pdf/PLAW-109publ282.pdf

https://www.whitehouse.gov/the\_press\_office/TransparencyandOpenGovernment

https://www.whitehouse.gov/sites/default/files/omb/memoranda/2013/m-13-13.pdf

http://our.dot.gov/team/dot.it/CIOP/DOT%20Order%201351.37,%20Departmental%20Cybersecurity%20Policy.pdf

http://our.dot.gov/team/dot.it/CIOP/CIOP%20-%20Privacy%20Risk%20Management%20-

%201351.18%20-%20Policy%20-%2009302014.pdf

http://our.dot.gov/team/dot.it/CIOP/Records%20Management.pdf

3) Are there processes and tools in place so that staff are sufficiently knowledgeable to ensure a continuity of the dataset for all stages of the lifecycle, especially during staffing transitions?

**Answer:** Processes and tools to ensure dataset continuity are in place and implemented for all lifecycle stages.

Justification Comment: Attachment(s):

The Aeronautical Information Services (AIS) Directorate AJV-5, National Flight Data Center (NFDC), of the Federal Aviation Administration (FAA) commits to providing quality aeronautical information products and services that enable our customers to effectively plan and safely operate within the global airspace system. AIS/NFDC achieves this goal by continually improving the timeliness and accuracy of its information and processes. The AIS/NFDC Quality Management System in place is responsible for advancing and maintaining the AJV-5 group data and processes using the Quality Management System (QMS) based on ISO 9001: 2008 requirements. The ISO 9001 ensures the processes and tools are recurrently of the datasets for all stages of the lifecycles. Tools such as Standard Operating Procedures (SOP) and Work Instructions (WI) are used especially for staffing transitions. The QMS also provide decision-making, flexibility, planning, and organizational skills necessary to enhance program goals. Oversee, maintain, and provide instrumental advice on process improvement to QMS. Analyze and recommend appropriate QMS changes to AIS leadership. Audit existing and new QMS procedures for compliance based on the ISO 9001:2008 regulatory requirements. Verify QMS documentation is available, functional, and efficient. Ensure Aeronautical Information Specialist (AIS) receive QMS education, training, and have QMS Awareness.

The Knowledge Services Network (KSN) can be located on the following KSN website: For internal use only

https://ksn2.faa.gov/ajv/home/AJV-2/23/qms/SitePages/Home.aspx

### STAGE 1 - Define/Plan

4) Are user and business requirements defined and formalized?

**Answer:** A recurring process is in place, including defining new partner and stakeholder business needs as they arise, and is fully implemented.

# Justification Comment: Attachment(s): 0

The Federal Aviation Administration's Office of Airports defines standards used in collecting and processing data through guidance provided in the FAA Advisory circular 150/5300-18: General Guidance and Specifications for Aeronautical Surveys: Airport Survey Data Collection and Geographic Information System Standards. Guided by Advisory Circulars, the airport sponsor or proponents are key links in the information chain. Use this Airports GSI web application to access airport data and submit changes matching defined business rules. After changes are submitted, the Airports GIS application notifies the proper FAA office.

https://airports-gis.faa.gov/public/index.html

http://www.faa.gov/regulations\_policies/advisory\_circulars/index.cfm/go/document.information/documentID/74204

5) How are partners/stakeholders involved in the requirements collection process?

**Answer:** A recurring process is in place, including defining new partner and stakeholder business needs as they arise, and is fully implemented.

# Justification Comment: Attachment(s):

FAA data users actively participate in setting the data requirements. They also submit requests for data and attribute enhancements. The aviation industry make requests through the Aeronautical Charting Forum which meets twice a year. It is likely that a data change control board will be established as the data becomes digitized and more geospatial.

6) Is there a quality assurance process for the dataset?

**Answer:** Quality assurance published as appropriate with respect sensitivity requirements.

Justification Comment: Attachment(s): 0

Aeronautical Information Services (AJV-5) Quality Policy:

Aeronautical Information Services AJV-5 (AIS) commits to providing quality aeronautical information products and services that enable our customers to effectively plan and safely operate within the global airspace system. AJV-5 achieves this goal by continually improving the timeliness and accuracy of its information and processes.

NFDC-Quality Objectives:

Ensure no more than 15% maximum random NFDD's have inaccuracies detected in final NFDD review.

Ensure 70% of Aeronautical Data Change (ADC) requests received online are processed within AIRAC cycle.

Ensure 70% of Aeronautical Data Inquiries (ADI) requests received online are processed within AIRAC cycle.

Ensure 80% of 8260-2's received are processed within AIRAC cycle.

7) Is there a process to evaluate the sensitivity, privacy, and confidentiality of this dataset?
Answer: Sensitivity, privacy, and confidentiality evaluations fully implemented, reviewed and updated on a recurring basis.

### **Justification Comment:**

The Aeronautical Information Services (AIS) Directorate AJV-5, National Flight Data Center (NFDC), of the Federal Aviation Administration (FAA) has embarked on an aggressive plan to transform and modernize the way dataset are collected, managed, disturbed and used in the FAA. This includes military operation, airport data, airport and airspace management, static and dynamic operations. AIS/NFDC dataset are for public and private use. Dataset do not contain any private, sensitive or confidential information.

**8)** Are defined data standards used in collecting, processing, and/or rendering the data? **Answer:** Standards fully implemented documented and published as appropriate.

# Justification Comment: Attachment(s):

The Federal Aviation Administration's Office of Airports defines standards used in collecting and processing data through guidance provided in FAA Advisory Circular 150/5300-18: General Guidance and Specifications for Aeronautical Surveys: Airport Survey Data Collection and Geographic Information System Standards. The data is not rendered for use in any geospatial capacity by the Office of Airports. All data gathered under this guidance is processed by the National Flight Data Center who disseminates and archives the data for public consumption.

http://www.faa.gov/airports/resources/advisory\_circulars/index.cfm/go/document.current/documentNumber/150\_5300-18

# STAGE 2 - Inventory/Evaluate

9) Is there a process for determining if data necessary to meet requirements already exist from other sources (either within or outside the agency) before collecting or acquiring new data?

**Answer:** Process for determining appropriate data is being reused fully implemented, reviewed, and updated on a regular basis.

#### **Justification Comment:**

The U.S. Department of Transportation's Planned Geospatial Data Acquisitions policy (February 2014) establishes procedures to eliminate unnecessary efforts. Specifically, no office may collect or produce geospatial data if a dataset that meets the office's needs already exist.

Attachment(s):

Attachment(s):

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Below is section four of the policy. It defines the Department's data acquisition procedures.

- 4.In order to avoid duplication of geospatial data acquisitions, offices and operating units within the Department shall not expend funds to acquire or produce geospatial data if an existing source for that data is available and meets mission requirements. Offices shall coordinate with other organizations, whether within or outside of the Department, if it is determined another organization is planning on acquiring or producing data that will meet the needs of the office as soon as possible, but no later than 30 days prior to the planned acquisition.
- 4.1.Before expending funds to collect or produce new geospatial data each office will search the officially designated National Spatial Data Clearinghouse and any other appropriate sources to determine if existing data meets agency needs. The office shall also search any Federal Geographic Data Committee (FGDC)-approved clearinghouse(s) containing references to planned geospatial data acquisitions as soon as the need for the data arises.
- 4.2. The office shall document the date, clearinghouse(s) searched, search criteria and results of that search.
- 4.3.If the office discovers/identifies geospatial data from another organization that is appropriate for the office use, the office shall obtain and use that existing geospatial data.
- 4.4.If the office discovers/identifies through the search required by Section 4.01 above that another organization has plans to acquire or produce geospatial data that is appropriate for use by the office, the office shall contact that organization and develop a plan to coordinate or partner with the other office as appropriate. They can share in the cost by including an Interagency Agreement to transfer the funding to the sponsoring agency.
- 4.5.If the office does not discover/identify existing or planned acquisitions of appropriate geospatial data, the office shall create a metadata record following FGDC requirements for metadata that describes the planned acquisition. The office shall publish the metadata to the appropriate National Spatial Data designated Clearinghouse(s).
- 4.6.If the office is contacted by an organization that is interested in the planned acquisition for geospatial data, the office shall coordinate with the organization to avoid duplication of the geospatial data acquisitions.
- 4.7. Upon request, the offices shall report to the Department Senior Agency Official for Geospatial Information (SAOGI) and Geospatial Coordination Council on activities related to this policy.

### STAGE 3 - Obtain

**10)** Is there a process for obtaining data in relation to this dataset?

Answer: Process is fully implemented, reviewed and updated on a regular basis.

#### Justification Comment:

The process for airports reporting this data is codified in Order 5010.4A Airport Data and Information Management and guidance to Airports are provided in Advisory Circular (AC) 510/5300-19 Airport Data and Information Program. Both the order and AC have just been recently updated in a long term formal process.

Attachment(s):

The financial support for the Office of Airport supplemental data collection is funded under a grant in our Airport Improvement Program enabling legislation; 49 U.S. Code § 47130 - Airport safety data collection

11) Is the metadata in a FGDC endorsed geospatial metadata standard?

**Answer:** Metadata is available in a format endorsed by the FGDC, it fully describes the dataset and provides all the information required to make the dataset discoverable, accessible, and

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usable.

#### **Justification Comment:**

Attachment(s):

The U.S. Department of Transportation's Creation and Publication of Metadata for Geospatial Data policy (February 2014) establishes that all Departmental offices and operating units of the Department that collect, procure, or produce geospatial data shall create metadata for geospatial data using standards approved by the Federal Geographic Data Committee (FGDC).

Below is section eight of the policy. It defines the Department's metadata procedures.

#### 8.REQUIREMENTS.

In accordance with the OMB Circular A-16, the agencies shall:

- 8.1.Document all geospatial data that is collected, produced, acquired, maintained, distributed, or preserved by the Department using a metadata standard endorsed by the FGDC.
- 8.2.Ensure metadata meets or exceeds the minimum requirements of the designated standard for both content and format.
- 8.3.Include additional information whenever appropriate to provide the maximum information available through the standard
- 8.4. Submit all geospatial metadata for publication to the FGDC designated Clearinghouse.
- 8.5. Ensure metadata meets requirements of the Privacy Act of 1974.
- 8.6.Ensure information in the metadata does not release proprietary, protected, or classified information.
- **12)** How complete is the geographic coverage as defined in the requirements for the dataset?

Part 1 Answer: Business requirements for cyclic updates identified and a process is in place.

**Part 2 Answer:** Dataset has presently attained the greatest geographic coverage as defined by the current requirements or roughly 100%.

#### **Justification Comment:**

Attachment(s):

The dataset was compiled from complete and comprehensive surveys. The data collected completely meets the needs of the user and covers more than the entirety of the Nation.

#### STAGE 4 - Access

**13)** Do you have a process for providing users access to the data in an open digital machine readable format?

**Answer:** User access process is fully implemented, data is available, process is reviewed and updated on a recurring basis.

#### **Justification Comment:**

Attachment(s):

The U.S. Department of Transportation's Bureau of Transportation of Statistics (BTS), under the Office of the Assistant Secretary for Research and Technology (OST-R), is federally mandated to produce and distribute the National Transportation Atlas Database (NTAD). This dataset is included on the NTAD DVDs are also available from BTS' Bookstore. Data on NTAD DVDs are provided in the

NTAD DVDs are also available from BTS' Bookstore. Data on NTAD DVDs are provided in the shapefile format; a De facto industry standard which is machine readable.

### Sources:

http://www.rita.dot.gov/bts/sites/rita.dot.gov.bts/files/publications/national\_transportation\_atlas\_databas e/index.html

https://2bts.rita.dot.gov/pdc/index.xml

#### STAGE 5 - Maintain

14) Is there a maintenance process for updating and storing the dataset?

Answer: Dataset maintenance process is fully implemented and processes are reviewed and periodically updated.

#### **Justification Comment:**

Attachment(s): The Aeronautical Information Services (AIS) Directorate AJV-5, National Flight Data Center (NFDC), of the Federal Aviation Administration (FAA) is responsible for the management of static and dynamic aeronautical information. AIS/NFDC is responsible for the collection, validation, verification, and quality control of aeronautical information that is disseminated to support National Airspace System (NAS). This process is maintained on a public website servicing both military and civilian aviation users, giving customers the ability to submit a variety of aeronautical data and aeronautical chart changes for analysis and implementation into the NAS. AIRNAV/ NASR are two databases within AIS/NFDC that are used to maintain, update, and store the dataset.

### **Key Functionality:**

- 1. Submit aeronautical data changes, aeronautical chart changes, and/or data inquiries. And any supporting documents.
- 2. Track your submissions via automated receipts
- 3. Direct communication with FAA Aeronautical Information Specialist
- 4. Access to the daily and 56 day aeronautical changes
- 5. Ability to browse airport data

The NFDC public-facing website:

https://nfdc.faa.gov

**15)** Is there an error correction process as part of dataset maintenance?

**Answer:** Error correction process established.

### **Justification Comment:**

The National Flight Data Center (NFDC) is part of the Aeronautical Information Services (AIS) Directorate (AJV-5) of the Federal Aviation Administration's (FAA). The NFDC website portal is intended to be utilized as a vehicle for airport questions, errors and comments. Any Aeronautical Data Inquiry (ADI) will be routed to the appropriate Aeronautical Information Specialist (AIS) and addressed in the order in which it was received.

#### **NFDC-Quality Objectives:**

Ensure no more than 15% maximum random NFDD's have inaccuracies detected in final NFDD review.

Ensure 70% of Aeronautical Data Change (ADC) requests received online are processed within AIRAC cycle.

Ensure 70% of Aeronautical Data Inquiries (ADI) requests received online are processed within AIRAC cycle.

Ensure 80% of 8260-2's received are processed within AIRAC cycle.

Ensure 80% of 8260-16's received are processed within AIRAC cycle.

The NFDC public-website for ADI's shown below:

#### STAGE 6 - Use/Evaluate

**16)** Is there a process to determine if the dataset meets user needs?

Answer: Process is being developed to determine if user needs are being addressed or met.

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Attachment(s):

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#### Answer:

Justification Comment: Attachment(s):

If user's needs are not being met they are directed to contact the Bureau of Transportation Statistics at 800-853-1351 or to e-mail us at answers@dot.gov.

17) Is there a process to provide users information on how to access and properly use the dataset?

**Answer:** Process is fully implemented supporting access and proper use, process is reviewed on a recurring basis.

#### **Justification Comment:**

Attachment(s): 0

The U.S. Department of Transportation's Bureau of Transportation of Statistics (BTS), under the Office of the Assistant Secretary for Research and Technology (OST-R), provides users with a description of this dataset and its intended purpose. Furthermore, BTS explains the dataset is provided in a shapefile format and that shapefiles are comprised of eight different sub files.

For further technical assistance using this dataset users are directed to contact the Bureau of Transportation Statistics at 800- 853-1351 and refer to the NTAD2015. Users may also contact us via e-mail at answers@dot.gov or visit the BTS website.

http://www.bts.gov/programs/geographic\_information\_services/

U.S. Department of Transportation Bureau of Transportation Statistics 1200 New Jersey Avenue, SE Washington, DC 20590 800-853-1351

**18)** Are the business processes and management practices assessed to meet changing technology? **Answer:** Assessment process is fully implemented for taking advantage of changing technology, process is reviewed on a recurring basis.

#### **Justification Comment:**

Attachment(s):

0

The U.S. Department of Transportation's Bureau of Transportation of Statistics (BTS), under the Office of the Assistant Secretary for Research and Technology (OST-R), has a mature and optimized process by which it collects, processes and publishes geospatial datasets. User and technical needs are assessed at the beginning of each production cycle and all practicable opportunities to optimize production or ease user consumption are taken.

#### STAGE 7 - Archive

**19)** Is there an archiving process for the dataset?

**Answer:** Archival and disposition processes are fully implemented.

Justification Comment: Attachment(s):

This dataset is archived in the National Transportation Library annually.

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